An
Inaugural Essay
on
Pneumonia
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Pneumonia

This is an inflammation affecting some of the viscera of the thorax, or the membrane which lines the interior surface of that cavity: when it attacks the pleura, it is known by the name of pleuritis &, when it has taken place in the substance of the lungs peripneumonia. There may be some difference between the two: but we have no symptoms by which we can distinguish them; and if there were it would be of no importance, since the treatment in both cases is precisely the same.

Whether inflammation be seated in the pleura, or in the lungs, it is known by the same symptoms viz First a sense of uneasiness about the thorax, and a cough so slight as to be entirely overlooked, or regarded as nothing more than such as in a greater or less degree frequently attends fevers, and

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the patient is believed to labored under nothing more than common fever, shivering alternating with fits of heat; thirst and anxiety, breathing hurried; the pulse more frequent than natural, and the temperature of the skin increased. Generally this disease makes its attack in a much less ambiguous way. A severe pain and a dry cough, with much difficulty of breathing, and a sense of weight and pain in the breast immediately under the sternum, extending back between the shoulders; increased by inspiration; restlessness, loss of appetite and sleep, the pulse frequent hard and strong & in the advanced stage of the disease, the pulse for the most part is weak soft and at the same time irregular. The difficulty of breathing is one of the symptoms of this disease which is almost always present

and is found to be most considerable in inspiration, increasing as the disease advances; it is often short and frequent the violence of the pain preventing a full inspiration. when the pain is either dull, or absent, the breathing is oppressed and laborious. accompanied with anxiety and a sense of weight about the praecordia. Sometimes the pain is much greater when the patient is in some par=ticular posture. It is said to be greatest when he lies on the side affected, some=times the reverse of this takes place. In many cases the easiest position for the patient is on his back, and frequently the erect posture is found to be the one which the patient prefers. Cough another attendant and very distressing symptom of this

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disease is greater in some persons than others, and accompanied by more or less pain, it is sometimes dry in the commencement, but at others it is attended with expectoration. But altho it is dry at the beginning, it seldom continues so during its whole progress. The colour and consistence of the matter expectorated varies very much in its appearance. At the commencement it is generally thin becoming thicker as the disease advances; sometimes the matter is streaked with blood, this ought to be attended to, as it is a point of some importance in a part of the treatment of pneumonia.
The pain in this disease is felt in different parts of the thorax which has given rise to the varieties of pneumonia mentioned by authors. The disease is always seated, or at least begins, in some part of

the pleura, which not only lines the cavity of the thorax, but invests the pericardium, forms the mediastinum, and covers the whole surface of the lungs. In considering the extent of this membrane we may easily account for the pain not being confined to any particular part, as we sometimes find it affecting the breast just under the sternum; between the shoulders, in the back; but the place of all others the most frequent is the left side, sometimes higher or lower. But writers tell us, it is usually about the sixth or seventh rib—

The pain is sometimes dull and obtuse, but oftener severe and pungent. It is much severer when it attacks the place just mentioned, Most commonly it remains fixed in one point; but it occasionally shifts from its primary seat and attacks

another part of the thorax. It may exist in one part of the pleura only, or it may be communicated to some other parts, and finally the membrane through its whole extent may become affected.

With respect to pneumonia, the causes are the same as with all other internal inflammations. The most frequent is the application of cold air to the body, giving a sudden check to perspiration thereby causing a considerable influx of blood to the pulmonary organs. It occurs most frequently in the winter and spring seasons of the year, and particularly under a variable and unsettled state of the weather. sometimes there are but few cases, at others there may be many owing to sudden changes in the atmosphere from heat to cold. It attacks principally those of strong constitutions,

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when there is a tendency to inflammatory diathesis prevailing in the system. Certain other causes, such as violent exercise or making some powerful exertion of the lungs, producing an increased action in them, have been known to occasion this disease. Such exertions as speaking, playing on instruments of music, singing &c may induce it, also the breathing of certain deleterious vapours; such as the fumes of arsenic, sulphur, and the muriatic acid &c

The treatment of pneumonia, like all other inflammations, is divided into general and local. It differs but little from all other inflammations; the chief and only difference arises from the nature and importance of the organ affected. The first thing to be considered in the management of pneumonia is general and local

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bloodletting, which should in every instance be carried to such an extent, as to occasion a tendency to syncope, or at least in a measure to relieve the symptoms, such as pain and difficult respiration before the blood ceases to flow from the patients arm. All medical men agree as to the propriety of prompt and copious venesection. We are directed to draw blood freely, making the orifice in the vein ample that the stream may flow largely and vigorously. There is no fact better ascertained, than the efficacy of sudden detraction of blood in reducing inflammation; it is admitted, that ten ounces of blood drawn from a vein quickly will prove as efficacious, as twice the quantity lost slowly from a small orifice, a circumstance so highly important in practice that

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it should never be forgotten. It is not an easy matter to give any precise rule, as to the extent to which venesection should be urged in this disease; much more danger is to be apprehended from the timid than from the extensive use of the lancet. In general I should in the case of a robust and vigorous constitution with confirmed pleurisy, the pulse being strong and the respiration difficult, take twenty or thirty ounces of blood at the first bleeding and if this should not answer the purpose, in a few hours the operation may be repeated perhaps nearly to the same extent. The small and repeated bleedings employed by some practitioners, are always attended with inconvenience. They harrass and debilitate the patient without contributing proportionally to the

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cure. After the inflammation has continued for a few days the capillary vessels become affected, and as these are in some degree independent of the heart and great arteries, no detraction of blood from the general circulation will have the effect of relieving them. This pathological view is proved to be correct and is illustrated by the whole order of the phlegmasiæ; for example, in protracted ophthalmia we cannot effect a cure without local depletion, for, the purpose of emptying the capillary vessels. The same thing applies to pneumonic inflammation. But here we must not too hastily relinquish the use of the lancet. for venesection is still necessary to relieve the lungs, provided the pulse maintains its vigour, as a vast quantity of blood is constantly thrown through them and must aggravate

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the inflammation. It is supposed by many that bleeding from the arm of the side affected is most beneficial. By Doctor Cullen this opinion is not considered as groundless. It may be asserted that drawing blood from the side affected is not of such importance as to make it be insisted on when it is more convenient to draw it from the other. The view we have in letting blood from the arm is to diminish the vis a tergo, which is accomplished equally well from whatever vein the blood is taken, provided it be of the same capacity and equally near the center of circulation. After we have reduced the inflammation as far as possible by the general means of depletion, we are next to resort to local means, and of these the most efficient are blisters. By some their utility is denied, but there is no doubt of their

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efficacy after the reduction of arterial action in all pneumonic cases. At this period they arrest the further progress of disease, and prove beneficial by extinguishing pain. But when they are applied too early, that is before the reduction of arterial action they seldom fail to aggravate the symptoms which they are intended to relieve, and most assuredly to occasion great distress to the patient. The blister should be large, and applied immediately over the seat of pain, or if there is no pain, on the anterior part of the thorax. If the symptoms do not readily yield, it is proper to support the discharge from the blistered part, or to apply a succession of blisters, which is preferable. It is necessary to apply them to some part of the thorax, as little or no advantage will arise from their application to more distant parts. It now

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may be proper to mention the advantages that do sometimes accrue from local bloodletting by means of cups applied to the sides breast or spine. They can be recurred to at any stage of the disease, and after general bleeding we will often have reason to be much pleased with their effects. Next I am to speak of those medicines which produce evacuations from the alimentary canal. These are called for, in all inflammatory affections to assist in reducing the force of circulation by stimulating the exhalent vessels on the surface of the intestines and by the copious effusions of serum the vessels are relieved, as it is so much taken from the circulating mass. In this way we are told by Dr Chapman they subdue the pulse, equalize excitement, and render important service in the management of febrile and inflammatory cases.

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Purging which is so beneficial in inflammatory affections does not seem to answer so important a purpose here as in some other local inflammations After the administration of a purge of calomel combined with some other active medicine as jalap, it will be necessary to keep the bowels in a soluble condition, by the use of castor oil or some of the neutral salts. By the combined operation of the remedies already mentioned, the excitement of the system will be sufficiently reduced, the next remedies to be employed are medicines which are calculated to produce perspiration. But experience however shews that except in the forming stage they are almost useless if not hurtful. It is stated by many that copious diaphoresis at the commencement of the complaint in many instances has entirely arrested, or greatly mitigate

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the attack, and reinstated health. Yet it is frequently prescribed, when arterial action is reduced, with the same view as blisters, of equalizing excitement and extinguishing the acute stage of pneumonic inflammation. Here the asclepias decumbens or pleurisy root seem to be very serviceable. As a diaphoretic it is distinguished by great certainty; and permanency of operation as well as the inestimable property, of producing its effects without increasing much the force of the circulation, or creating inquietude and restlessness. On this account it is very well calculated for the forming stage of this; and many other inflammatory diseases. In the progress of the disease, this class of remedies ~~are~~ is used as auxiliaries to venesection, as nitre and ipecacuanha and the antimonials as soon as the cough becomes loose and

expectoration takes place, then the disease is broken and it becomes necessary to resort to the various cough mixtures —
When the disease has abated, some of the more violent symptoms remain, as tightness of the chest and a dry hard and sharp cough, when these continue the best prescription is Ipecacuanha, opium and calomel repeated at short intervals, this will allay irritation, and procure rest.
In protracted cases of this kind the cure may be accelerated, and at the same time rendered more certain and compleat, by slightly touching the mouth with mercury
To effect this one grain of calomel may be added to one of the antimonial powders; and if requisite a few drops of laudanum given occasionally to prevent them from purging. In the treatment of pneumonia it is of some importance that the disease

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be completely cured. If any remnant of the cough be left it facilitates or invites a return and consumption not unfrequently follows. Cough is much more certainly removed by pushing bloodletting to the necessary extent than any other remedy we can use: